

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
25 September 2003 (25.09.2003)

PCT

(10) International Publication Number
WO 2003/077838 A3

(51) International Patent Classification⁷: **C12P 21/06**,
A61K 39/00, 38/00, C07K 17/00, C07H 21/04

(21) International Application Number:
PCT/US2002/007144

(22) International Filing Date: 5 March 2002 (05.03.2002)

(25) Filing Language: English

(26) Publication Language: English

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(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

(88) Date of publication of the international search report:
29 July 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **HIV-1 ENVELOPE GLYCOPROTEINS STABILIZED BY FLEXIBLE LINKERS AS POTENT ENTRY INHIBITORS AND IMMUNOGENS**

(57) Abstract: This invention relates generally to immune responses to human immunodeficiency virus coat protein gp160 presented in the form of antigenic compositions, nucleic acids encoding human immunodeficiency virus coat proteins, and vaccines. The invention also relates to methods for production of antigenic compositions containing human immunodeficiency virus coat protein, nucleic acids encoding human immunodeficiency virus coat proteins, and human immunodeficiency virus vaccines. The invention comprises gp120 and gp41 subunits of the human immunodeficiency virus coat protein covalently linked through a peptide linker, as well as additional complexes including those comprising the human immunodeficiency virus coat protein and its natural cellular receptor molecules.



WO 2003/077838 A3



Published:

— without international search report and to be republished upon receipt of that report

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/07144

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C12P 21/06; A61K 39/00, 38/00; C07K 17/00; C07H 21/04
US CL : 435/69.1; 424/185.1; 514/2; 530/350; 536/23.4

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : Please See Continuation Sheet

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
WEST, Medline

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
T	CHOW et al. Conserved structures exposed in HIV-1 envelope glycoproteins stabilized by flexible linkers as potent entry inhibitors and potential immunogens. Biochemistry. June 04, 2002, Vol. 41, No. 22, pages 7176-82, see entire document.	1-84
Y	US 5,635,599 A (PASTAN et al.) 03 June 1997 (03.06.97), see SEQ ID NO: 55.	1-84
E	US 2003/016677 A1 (ZAUDERER et al.) 04 September 2003 (04.09.03), SEQ ID NO: 19.	1-84

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☐ See patent family annex.

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Date of the actual completion of the international search

01 March 2004 (01.03.2004)

Date of mailing of the international search report

04 MAY 2004

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